72 HOUR EMERGENCY PREPAREDNESS KITS

by Gemie J. Martin

**SAFETY FIRST**: Be sure to keep your kits out of the reach of small children who may ingest harmful chemicals or medicines and could choke on small parts or cut themselves on sharp objects. I would hate for your emergency preparedness kit to be the cause of your having to make use of your first aid kit. If there are dangerous items your child will need, keep those things in **your** pack. I would not put any plastic zippered bags in a child’s pack that are large enough for them to put their head into it.

 We have opted not to have flammable liquids (like the liquid candles popular in many kits) in our packs. The exception would be a small butane lighter (the type used to light cigarettes) to be used in starting a fire. I do not have candles in my 72 hr. kit at all because of the safety issue.

**BACK PACKS**: We have tried several types of containers and have found that the individual hiking-type backpacks work best for our family. We want each person to be able to survive well on their own in the event they become separated from other family members.

 You can sometimes find nice backpacks very inexpensively online at [www.coleman.com](http://www.coleman.com/) in the outlet store part of their website. The site also has an interactive feature to help you choose which type (internal vs. external frame) is right for you. I suggest you take family members to try on different styles of back packs especially if they will be using them a lot to hike with. Make sure you know how to properly fit it to you so you will not do damage to your back and shoulders. If the back pack does not come with straps for your sleeping bag, they can be purchased very inexpensively. Make sure your pack has slots to thread the straps through. If it does not you will need another means of attaching it. Day packs or even school backpacks could be used for small children. Visit [www.sosproducts.com](http://www.sosproducts.com) to find inexpensive school sized backpacks. Be careful not to overload children’s backpacks. Put items that could be harmful to children in adult’s packs.

 We store our filled back packs on shelves in our individual bedroom closets. You need to remember that because food items are involved, a cool, dry, dark place will preserve them longer. If they are stored in the garage in the summertime, their shelf life will be shortened considerably.

**GRAB AND GO CONTAINER**: We have a large plastic storage bin that sits in the garage. Into it we have placed tents, our camp shovel and saws, a camp stove (or two), extra containers of water, our ground pads (to our sleeping bags) and other things that are too large for our backpacks. If we need to evacuate and are able to take our car, our Grab and Go container will go in the trunk just as we leave. Sleeping bags could be stored in or near this container.

**ZIPPER CLOSED STORAGE BAGS**: These are wonderful to use in organizing your kit. You will actually have many kits within a kit. They help keep all the items inside your pack dry. You can easily find the item you are looking for if it is grouped with other items it is similar to or will be used with. You could use these bags if necessary to store damp things as well as wastes. (It is a good idea to include several empty extras.) I use different sizes from a 2.5 Gallon Hefty One Zip down to the Target brand snack size.

 To get the excess air out of the 2.5 gallon, I fill it, partially zip it up then lay on it to squish the air out and finish zipping it while I am still laying on it. (Yes it is as hard to do as it sounds, but it does get the air out so things will fit better in your bag). Do not try this with hard items such as cans in the bag.

**ROTATING ITEMS**: Many things in the kit will have an expiration date. Twice a year (near General Conference time for us), we have a family home evening where we go through our 72 hr. kits; replace what it missing; and switch out all food items except the MREs (Meals Ready to Eat), which have a longer shelf life. Make sure you check the expiration dates on the medicines in your kit as well. Toss out expired items and replace them.

**WATER**: Don’t let the fact that water appears on page two of this handout fool you. It is probably the single most important item you will take. You should carry a minimum of 64 ounces/person in your 72 hour kit. This will **not** get you through 3 days. Active adults need about one gallon of water/day. If you can, take more water. If we are to evacuate by car, we have a supply of gallon jugs of water in our garage that we can throw in before we leave. We are counting on being near enough to a water source after the first day to be able to use our filter and treatment systems to purify water for drinking. I have tried different water carrying systems and have arrived at the following plan: Each family member will have two 32 ounce water bottles in their kits. These bottles will have a carabiner to attach it to a belt if necessary.

 Be sure to test all bottles before putting them into your pack to make sure they do not leak. I have Nalgene bottles which never leak and are virtually indestructible in our kits. The new ones are manufactured without BPA (a chemical deemed harmful). The church website suggests that water be stored only in containers marked “PETE” or “PET.” If you find any good water bottles marked “PETE” or “PET,” please let me know. Used soda pop 2 liter bottles are “PETE.” You can also buy water in bottles that are marked “PETE.” Do not substitute carbonated drinks for water. Many have too much salt which will make you thirsty and the carbonation may decrease your lung capacity.

 If your water has been sitting undisturbed for a time if will taste “flat.” This means that some oxygen has escaped from it. It is easy to re-oxygenate by pouring it from one container to another.

There are several products that can be used to purify water. The best will kill bacteria, viruses, protozoa, and cysts in contaminated water. Read the packaging. Keep in mind that only reverse osmosis filter types can remove chemicals. In our day and age where many water sources have been contaminated by industrial wastes, this is an important consideration. These are fairly expensive. Taste is often improved by using a filter.

 **Iodine** is one of the most effective methods. It adds a funny taste to and slightly discolors the water. For this reason we include artificially sweetened Kool-Aid in our kits. There are new individual serving packets which we have included in our 72 hour kits. We also have neutralizer which can take away the iodine taste and color. Iodine does not eliminate cryptosporidium. Keep in mind that iodine has an expiration date. Iodine should not be used for more than three days.

 **Chlorine Dioxide** kills nearly all organisms including cryptosporidium. It takes four hours to work. The tablets are very toxic if ingested. It is more expensive than iodine. I have some in my 72 hour kit.

 **Chlorine (bleach**) kills most organisms. The downside to chlorine is that it will stain your clothing if it comes in contact with it. I do not carry it because of the risk of it spilling inside my pack. I do not believe it is effective against giardia or cryptosporidium.

 **UV Light** can be used to inactivate organisms. The SteriPEN from Emergency Essentials is such a devise. It will inactivate all organisms including giardia and cryptosporidium. The down side is that the water needs to be very clear or the light will not be able to get to all the microorganisms. The upside is that it is very small and can easily fit into your 72 hour kits.

 **Filters** are the most comprehensive method for purifying water. They can reduce some harmful chemicals as well as organisms. You should look for one that can filter to 0.2 microns. The Katadyn Combi uses two types of filter. The 0.2 micron ceramic filter removes bacteria and protozoa including giardia and cryptosporidium. The carbon filter reduces chemicals and bad taste. It is fairly expensive at around $220.00. It is 12” tall and weighs 21 ounces. The Church’s preparedness website ([www.providentliving.org](http://www.providentliving.org/)) has a link to several websites to obtain other brands of filters. Emergency Essentials sells a sport type water bottle that filters, and then provides drinking water in the same bottle. Katadyn makes one that can also be purchased at sporting goods stores.

**FIRST AID**: As much as possible get single use packets for the contents of the first aid kit that goes in your 72 hour kit. Don’t be afraid to buy a larger kit and remove only the contents you wish to include in your 72 hour kit. It is actually often less expensive to do it this way. You can buy first aid kits (200 plus pieces) at discount stores very reasonably. Emergency Essentials also has kits that they frequently put on sale. I have a soft pouch made by Sawyer that houses most of my 72 hour first aid supplies. These can be purchased at sporting goods stores. The Sawyer bag has belt loops on it so it can be carried outside of the back pack if you wish. I then have a one quart zippered storage bag that has larger items like the triangular bandage which will not fit in the Sawyer bag.

 Moleskin is very important in the event that you do any hiking. It should be applied to any “hot spots” on the feet to prevent blisters. It can be used to cushion any blisters you may have already formed by placing it around the blister instead of directly on it.

 Poison Ivy, Oak and Sumac soap must be used immediately after contact with the plant in order to prevent a reaction. Contaminated clothing can be put in a zippered bag or garbage bag to prevent more exposure to the plant oil until clothing can be laundered.

 Potassium Iodide is to be used only if there is a nuclear emergency. In the event of a nuclear disaster radioactive iodine particles are released into the atmosphere. Your thyroid absorbs all iodine that comes into your body. Potassium iodide will flood your thyroid with iodine, preventing it from absorbing the radioactive iodine and thus being damaged. Take only **when** directed **as** directed. I plan on getting the tablets that are scored. They can be used whole for adults, or cut in half for children. Go online and learn more before deciding to include this in your kit. Caution: Make sure persons taking this medication are not allergic to iodine.

 FYI—if a tablet is scored (an indentation divides it in half), an equal amount of the active ingredients are in each half and you can cut it in half. If it is not scored the active ingredients may be unevenly mixed and it should be crushed, mixed and divided.

 Electrolyte tablets or powders are included in many of the large first aid kits. If you do not find them at the drug store, go online. They can be very important to restore the electrolyte balance due to fluids lost through vomiting, diarrhea, or excessive sweating due to hot weather.

 Another thing that needs explanation is the clear nail polish for chiggers. The nail polish seals off the little mite and kills it. (The only good chigger is a dead chigger). You just dab it directly on the red bump where the chigger is. Apply at first sign of problem.

**SHELTER**: The tube tents we have for our 72 hour kits are very simple. They are open at the ends. These require trees or something similar in order to set them up. Tube tents offer little if any protection against animals such as armadillos and even worse, skunks. They would not work well to shelter us in a Texas-type rain storm. We have a few two man tents in our “Grab and Go” container should we ever need to evacuate and can take our car. There are two to three man tents available that are lightweight and easy to set up, they just do not fit in the backpack.

 Your sleeping bag should be chosen to keep you warm in the type of weather you are likely to encounter. They are rated to withstand certain temperatures. Choose accordingly. Using a compression bag to stuff your bag in is a very good idea.

 There are three main types of ground pads. They are closed cell foam, open cell foam, and sealed open cell foam. I think the closed cell foam is the best choice for the 72 hour kit. It is lightweight, inexpensive, and remains dry. It also has good insulating properties. Its main drawback is that is provides less cushion than the other two types. Air mattresses are not a good option in the winter. They put a layer of cold air just under your body, making you cold. Good ground pads actually insulate you from the coldness and dampness of the ground.

 The small rescue blankets are made out a material that will reflect back 80% of your body heat. There is also a sleeping bag version made of the same material. These items are available from Emergency Essentials as well as many sports center stores and in some first aid kits.

**CLOTHING**: Clothing can be changed twice a year to accommodate the different seasons. I keep all the winter clothing items in one bag and the summer in another. Furthermore, I keep both sets in my backpack. Make sure to keep children’s clothing updated so they won’t discover in an emergency that they have no clothing that fits.

 Even in the summer, long pants offer the best protection for you from bites, scrapes, scratches, and etc. If needed, you could always cut them off.

 We keep our kits in the bedroom closets where our coats are stored. If there is room you could include a lightweight jacket in your pack otherwise when you grab your pack, grab your coat or jacket at the same time. It can be worn around the waist if needed.

 Socks should be primarily natural fibers like wool and cotton. Wool socks will keep your feet warm in the winter. Wool also absorbs moisture. If it is not going to be cool enough to keep the wool socks with you, take an extra pair of cotton socks. Your shirt for summer should be light weight, loose fitting, and light in color.

 You need comfortable shoes or boots for walking. You need a spare pair in case your main pair gets wet or lost. An old pair will do. Make sure that children have not outgrown the shoes stored for them. Our plan is to wear a good sturdy pair and keep an old pair in our 72 hr. kits.

**FOOD**: Plan to have at least one complete meal each day. You can have things to snack on for the other two meals. Food items should need little or no preparation. I include hot chocolate mix in our kits to add more protein and to help flavor treated water. I plan to do very little heating of the water unless it is very plentiful. I have a collapsible burner and fuel in case we do reach a point where we need to catch fish or animals for food and cook them or boil water.

 If you include MREs (Meals Ready to Eat) in your kit, take a permanent marker and write the expiration date on them when you purchase them. The case they are shipped in has the expiration date marked on it but many of the individual packages do not. If you get them individually and do not know the expiration date, I would consider it to be 4 years from the date purchased. Even expired MREs may be edible—the nutritional value may be less. With some things (like crackers) you can tell that the oils have gone rancid. Even though they may not taste as good, they are not harmful to eat. Be warned that some of the items in the MREs are dehydrated. This is fine if you have an adequate source of water. I have chosen prepackaged meals for my MREs instead of the individually packaged entrees and side dishes because they are protected more from being mashed in the kit. They also take up a bit more space—it’s a tradeoff. MREs have a shelf life of five years if stored below 75°. I have mine marked to be changed out in four years because we do not cool our closets to less than 75° in the summer.

 I have heard of one horror story in which the pull-top can seal failed, the contents leaked into the 72 hour kit. The owner found his kit moldy. Much of his pack needed to be discarded (including the back pack). For this reason, I encourage you to find conventionally sealed cans (which are increasingly hard to find, especially in the smaller sizes) and include a can opener. If you decide to go with the pull-top cans, store these in a zipper bag and check them more frequently.

**COMMUNICATIONS:** The best communication devise you can have (in my opinion) is your cell phone provided it works. The Nebo hand cranked emergency flashlights have an adaptor that can be used to charge some types of cell phones. Of course you will not keep your cell phone in your backpack; it will be one of those items you will grab as you go.

 The whistle can be worn around each person’s neck if the situation warrants it. If someone gets separated they can use the whistle to let others know where they are. Have children practice blowing into the whistle. Children should be taught to stay in place if they become separated from the rest of the group (provided there are no obvious dangers where they are).

 The best signal mirrors (in my opinion), are the metal ones sold by the scout shop. They have a hole in the center which can be used to site airplanes to make sure your signal is seen. They come in a little fabric case. Aluminum foil can be used as a large signal mirror.

 There are many emergency short wave radios on the market. I purchased one which can be hand cranked and/or battery operated. It can also tune into the weather station. I am wondering if it isn’t just too large for the 72 hr. kit. It will probably go in the “Grab and Go” container. The smaller ones need batteries. Store all batteries outside the equipment they are to power.

**HYGIENE**: Most of these items are self-explanatory. The dental floss could be used for such things as setting up traps or snares, bundling items together, emergency shoe laces, etc. Soft toilet paper could double for facial tissue. Smash the tubes of both toilet tissue and paper towels. These two items will fit better if they are not full rolls. The ear plugs are in case you need to filter out noise in crowded conditions.

 A plan to dispose of human wastes should be devised. We have several portable toilets in our “Grab and Go” kit. A bucket with a toilet seat (made to fit it) could be used. The seats can be purchased with the bucket (along with a supply of bags and enzymes) or the items can all be purchased individually. The bags and enzymes could be put in your home toilet and used in case you are sheltering in place and the sewer and water systems are down. (Garbage can liners may be less expensive than those you would purchase from preparedness stores.)

**LIGHT AND FUEL**: You should have at least two types of fire starters. Keep matches in a water proof container and it goes without saying, away from children. According to Stephen Ririe in his 72 Hour Kit Emergency Preparedness Handbook, cotton balls make great tinder so does dryer lint, but I doubt I will be taking the latter with me.

 I have several compressed fuel heat tabs. You can buy them at the Army/Navy stores. They take up very little space.

 Each person should have a flashlight. Store the batteries (if needed) separately. Buy a spare flashlight bulb in case the bulb burns out on the standard flashlights. It should not burn out on the Nebo flashlight. A large lantern and spare 6 volt batteries will be part of our “grab and go” kit.

 The fuel cells that you can purchase from Emergency Essentials can be used for cooking and for warmth. Their lid is the temperature control. Do **NOT** use them in a closed tent to keep warm when sleeping. Carry an adequate sleeping bag, a Mylar rescue blanket (or Mylar sleeping bag) and clothing for warmth.

**EQUIPMENT AND TOOLS**: Many of these items are optional, but useful. Some, like the camp shovel, axe, saw, and cook stove are not needed by every family member. Make sure you have tried out the equipment and that it actually works.

 Each person should have a bowl, cup and spoon. These can be spare items you have around the house. We do not carry paper or Styrofoam because they can be damaged too easily and cannot be reused. At least one person in your group should have an aluminum or ceramic covered metal pan (or large cup) to be used to boil water This large cup can be used to heat things in and can double as your bowl. A stainless steel spoon or several heavy duty plastic spoons complete the necessary equipment for eating. There are collapsible cups available that do not take up much space.

 Everyone except small children should have several garbage bags. I have several different sizes in my pack. These can be used to line a makeshift toilet or latrine. They can be used to contain clothing that is wet or has come in contact with Poison Ivy, Oak or Sumac. They can be used as ground cover if necessary. They can also be used as a poncho (although we have the small emergency ponchos in our kits).

 I include tin foil in my kit in case we catch fish to cook. My foil is a small roll, mashed flat. I removed the ends of the box it came with and store the foil in the flattened box. The box protects it and has the serrated edge to be used to cut the foil.

 Steven Ririe suggests you have 35 yards of fish line. You can wind about ½ of that around a sewing machine bobbin. I have two bobbins in my kit. I have taped them so they do not unwind and have labeled them “fish line.” I have all my fishing equipment in a small plastic container.

**OTHER**: It is up to you adults to determine how much money you and each family member should carry. Vending machines, Laundromats, and phone booths take quarters so it is important to have a good supply. As far as paper money, one dollar bills are preferable. People you deal with may not have the capacity to make change.

 Think small for the “boredom busters,” as Stephen Ririe call them. Also consider the safety of each. I keep my pencil sharpened with tape around it so it won’t slip out, in the spiral of my small notebook. This also helps keep it from getting lost. Bring a permanent marker to mark, identify and label things you may need to. It could also be used to write on an injured person’s clothing their name, pertinent medical information, and a contact’s phone number in case their condition worsens and they are not able to talk. A friend of ours, Dale Patterson actually did this in an airline crash several years back. He wrote medical and identification information with a pen on an injured woman’s large collar in case he was separated from her and she lost consciousness.

 The documents are very important. In the event of a disaster that destroys your home, you will need proof of ownership. You may need to be able to prove that you are who you say you are. Medical records are very important to have with you. Up-to-date immunization records can determine if you or your child needs a Tetanus booster. You may need to cancel or reorder credit cards.

**FINAL NOTE**: It can be very expensive to acquire all the items on this list. If you prioritize your purchases, use items you have on hand, take advantage of sales, and space out your purchases, you should be able to eventually have an adequate kit for everyone in your family.

 I have derived my information from many sources. I am certain to have missed important items and information and included many items that you may not wish to include in your kit. Articles have been printed in the Ensign and other church publications throughout the years. Please prayerfully read and study from several different sources yourself when you assemble and update your 72 Hour Kits. Three great sources for emergency preparedness are [www.providentliving.org](http://www.providentliving.org/) , [www.fema.gov](http://www.fema.gov/) , and [www.redcross.org](http://www.redcross.org/) .